



# **RPI-TL**

## **12V DC to 120VAC Power Inverter**

The RPI-TL utilizes the Tripp-Lite power inverter/charger.

The Ramset RPI-TL inverter supplies up to 750 watts of continuous 120V AC power. During blackouts and power fluctuations the RPI-TL responds with a near instantaneous (16.6 milliseconds) automatic transfer to battery-derived AC output. This near instantaneous transfer ensures smooth transitions between regular power and battery-derived power even during mid cycles.

### **FEATURES**

- 12V DC or 120V AC input; 120V AC output; 2 outlets.
- 750 Watts (continuous) / 1500Watts (peak)
- 3 stage, 20 amp selectable wet/dry battery charger.
- Reliability enhanced large-transformer design with protected DC wiring terminals.
- Battery Monitoring - When the battery charge is down to approximately 10% of the remaining operational charge the RPI-TL will open, or close, the gate and continue to hold it open until power is restored.

### **SYSTEM OVERVIEW**

Voltage Compatibility - 12V DC / 120V AC  
Frequency Compatibility - 60 Hz

### **OUTPUT**

Output Watts - 750W (continuous) / 1500W (Peak)  
Output nominal voltage - 120V (AC) / 12V (DC Charger)  
Output Voltage Regulation  
Line Power (AC): Maintains 120V nominal sine wave output from line power source.  
Inverter Power (AC): Maintains PWM sine wave output voltage of 120V AC (+/-5%)  
Output Frequency Regulation - 60Hz (+/- 0.3 Hz)  
Overload Protection - Includes 6A AC input breaker dedicated to the charging system and 8A output breaker for AC output loads.

### **SURGE/NOISE SUPPRESSION**

AC Surge Suppression - 450 joules

### **INDICATOR LIGHTS (Located on the side of the RPI-TL )**

The green indicator light is on when the unit is receiving AC power.  
Slow flash - Indicates that the unit is operating under battery power.  
Fast flash - Indicates that battery power is at 25% or less.

The red indicator light is on when battery has reached it's operating limit and gate will remain in it's predetermined state.

The unit will return to normal operation when AC power is restored

### **PHYSICAL**

Shipping Weight: 50 lbs.  
Unit Dimensions: 10 3/4" x 15 1/4" x 21 1/2"  
Material of Construction: 14ga. Steel, powdercoated

## BATTERY

**Recommended Battery:** DieHard Marine Deep Cycle/RV Battery, Group Size 24M. 500 CCA and 135 minutes reserve capacity.

All testing and cycle amounts were obtained using the above mentioned battery.

Runtime will vary depending on the battery that is used.

Runtime is expandable with any number of user supplied wet or gel type batteries.

**Battery Monitoring:** When the battery charge is down to approximately 10% of the remaining operational charge the RPI-TL will open (or close) the gate and maintain the desired position.

## LINE/BATTERY TRANSFER

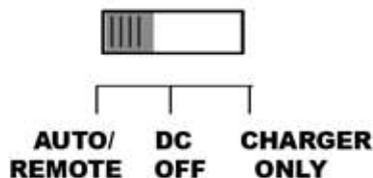
Transfer Time From Line Power to Battery Mode: 16.6 milliseconds.

## TRIPP-LITE CONFIGURATION

### CONFIGURATION SWITCH SETTINGS (Located on the Tripp-Lite)



### OPERATING MODE SWITCH (Located on the Tripp-Lite)



**AUTO/REMOTE (Factory Setting)** - Constant, uninterrupted AC power for the connected operator.

**DC OFF** - Prevents the inverter from drawing power from the batteries. Use this mode to automatically reset the unit if it shuts down due to overload or overheating.

**CHARGER ONLY** - Not using connected operator in order to conserve battery power by disabling the inverter. The inverter will still charge the batteries and pass the 120V AC source voltage to the connected operator but will not supply battery-derived AC V when source voltage is lost.

## WARRANTY

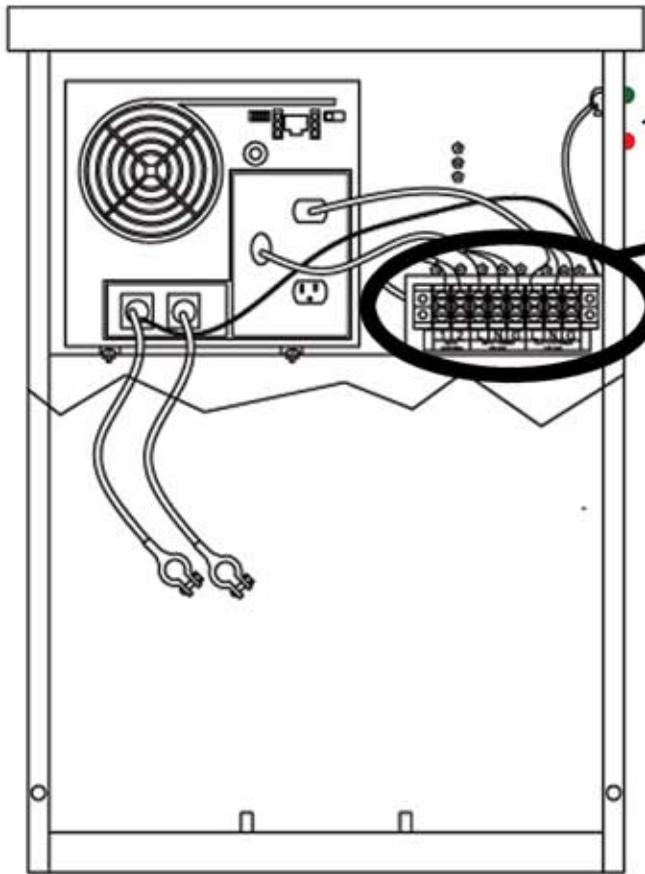
Limited 2 year warranty (Call for warranty information)

# WIRING DIAGRAM

**INDICATOR LIGHTS**

**Green LED**  
Solid - Source AC V is present  
Slow Flash - Battery-derived AC V is being used.  
Fast Flash - Battery power is at 25%

**Red LED**  
Solid - Battery power is too low to run the operator. The gate will remain in it's predetermined state (open/close)



Control Board  
Terminal Strip

Main Power Input  
(From Breaker Box)

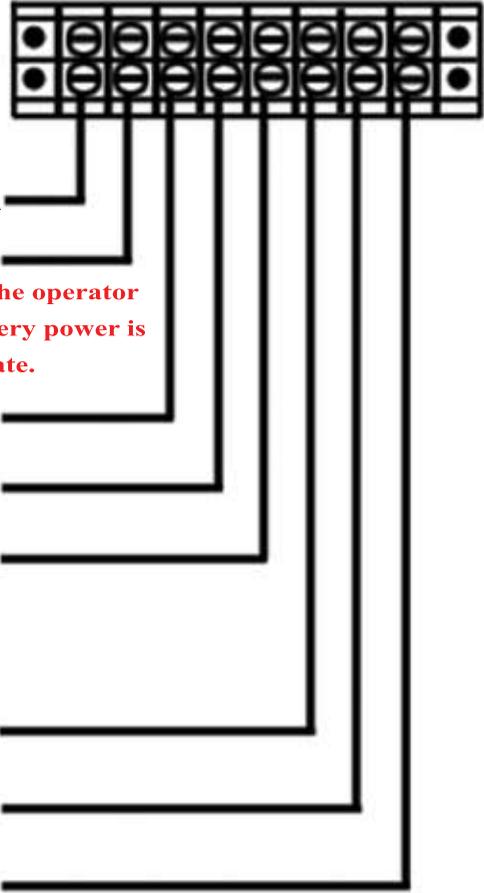
Main Power Output  
(To Gate Operator)

Common  
Exit/Close

Exit/Close - Sets the position the operator will latch the gate in if the battery power is too low to move the gate.

Line  
Neutral  
Ground

Line  
Neutral  
Ground



# TRIPP-LITE INVERTER CONFIGURATION

## LED - Battery High/Med/Low

### Approximate Battery Charge Level

Green	- 91% - Full
Green & Yellow	- 81% - 90%
Yellow	- 61% - 80%
Yellow & Red	- 41% - 60%
Red	- 21% - 40%
All 3 lights off	- 1% - 20%
Flashing Red	- 0%

### Fault Condition

3 lights flash slowly - Excessive Discharge  
3 lights flash quickly - Overcharge

## LED - Operation Line/Inv/Load

### Green (Line)

Solid light - Source voltage is present. (Auto/Remote mode)  
Blinking light - The inverter is off (Charge Only mode)

### Yellow (Inverting)

Solid light - Operator is receiving battery-supplied AC power.

### Red (Load)

Solid light - Inverter is functioning and the power demanded by the operator exceeds 100% of load capacity.  
Blinking light - Inverter shuts down due to severe overload or overheating.

## CONFIGURATION SWITCH SETTINGS

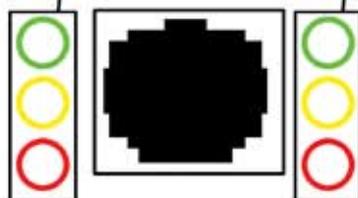
Dip 1, 2 & 3 - Always leave in the 'off' position (down)  
Dip 4 - Battery Type  
'off' - (Factory Setting) Wet Cell (vented) Battery  
'on' - AGM/Gel Cell (sealed) Battery

## OPERATING MODE SWITCH

**Auto/Remote (Factory Setting)** - Supplies constant, uninterrupted AC power for the connected operator.  
**DC Off** - Prevents the inverter from drawing power from the batteries. Use this mode to automatically reset the unit if it shuts down due to overload or overheating.  
**Charge Only** - Not using connected operator in order to conserve battery power by disabling the inverter. The inverter will still charge the batteries and pass the 120V AC source voltage to the connected operator but will not supply battery-derived AC V when source voltage is lost.



Configuration Switches



BATTERY

OPERATION

HIGH  
-----  
MED  
-----  
LOW

AUTO/  
REMOTE    DC  
OFF    CHARGER  
ONLY